

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	21504	(electron adj (tube or gun))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L2	12800	((electron adj (tube or gun))) and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L3	1958	((((electron adj (tube or gun))) and cathode) and heater	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L4	395	(((((electron adj (tube or gun))) and cathode) and heater) and sleeve	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L5	21	(((((electron adj (tube or gun))) and cathode) and heater) and sleeve) and needle	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L6	47652	(electron adj (tube or gun))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L7	24559	((electron adj (tube or gun))) and cathode	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L8	2877	((((electron adj (tube or gun))) and cathode) and heater	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L9	90	(((((electron adj (tube or gun))) and cathode) and heater) and needle	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L10	90	(((((electron adj (tube or gun))) and cathode) and heater) and needle	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L11	46	(((((electron adj (tube or gun))) and cathode) and heater) and needle) and (carbon or nanotube or nano-tube or graphite)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/25 23:14
L12	21	(((((electron adj (tube or gun))) and cathode) and heater) and sleeve) and (needle or nanotube or nano-tube)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L13	2	(((((electron adj (tube or gun))) and cathode) and heater) and sleeve) and (nanotube or nano-tube)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L14	119	(((((electron adj (tube or gun))) and cathode) and heater) and (needle or nanotube or nano-tube)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L15	67	(((((electron adj (tube or gun))) and cathode) and heater) and (needle or nanotube or nano-tube)) and @ad<"20010622"	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L16	42	(((((electron adj (tube or gun))) and cathode) and heater) and (nanotube or nano-tube)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L17	11	(((((electron adj (tube or gun))) and cathode) and heater) and (nanotube or nano-tube)) and @ad<"20010622"	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L18	35	(((((electron adj (tube or gun))) and cathode) and heater) and (needle or nanotube or nano-tube)) and @ad<"20010622" and nickel	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L24	15737	cathode and heater	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L25	1097	(cathode and heater) and roughness	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L26	773	((cathode and heater) and roughness) and base	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14

## EAST Search History

L27	531	((cathode and heater) and roughness) and base) and electron	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L28	9064	(cathode and heater) and base	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L29	4863	((cathode and heater) and base) and electron	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L30	2402	((cathode and heater) and base) and electron) and (wt or weight)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L31	292	((cathode and heater) and base) and electron) and (wt or weight)) and needle	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L32	4863	((cathode and heater) and base) and electron	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L33	2401	((cathode and heater) and base) and electron) and path	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L34	525	((cathode and heater) and base) and electron) and (path with (conductive or conducting or conduction))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L35	21504	(electron adj (tube or gun))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L36	504	((electron adj (tube or gun))) and (surface adj (roughness or rough-ness))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L37	225	((electron adj (tube or gun))) and (surface adj (roughness or rough-ness))) and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L38	144	((electron adj (tube or gun))) and (surface adj (roughness or rough-ness))) and cathode) and (ito or nickel or magnesium or rhenium or molybdenum or platinum or pt or mo or rh or mg or ni or (indium with tin))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L40	1121	((electron adj (tube or gun))) and grain	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L41	591	((electron adj (tube or gun))) and grain) and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L42	226	((electron adj (tube or gun))) and grain) and cathode) and nickel	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L43	12800	((electron adj (tube or gun))) and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L44	30	((electron adj (tube or gun))) and cathode) and (nickel with grain)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L45	95	((electron adj (tube or gun))) and cathode) and (specific adj (resistance or resistivity))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L46	6251	((electron adj (tube or gun))) and cathode) and (thick or thickness)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L47	78	((electron adj (tube or gun))) and cathode) and (thick or thickness)) and (specific adj (resistance or resistivity))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L48	2395	((electron adj (tube or gun))) and cathode) and (thick or thickness)) and (resistance or resistivity)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L49	149	((electron adj (tube or gun))) and cathode) and (thick or thickness)) and (resistance or resistivity)) and needle	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L50	78	((electron adj (tube or gun))) and cathode) and (thick or thickness)) and (specific adj (resistance or resistivity))	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L51	8	((electron adj (tube or gun))) and cathode) and (thick or thickness)) and (specific adj (resistance or resistivity)) and needle	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L58	61609	"313"/\$.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L59	20456	L58 and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14

## EAST Search History

L60	1376	313/346r.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L61	882	L60 and cathode	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L62	241	L61 and (carbon or nanotube or nano-tube or nanofiber or nano-fiber or nano-cylinder or graphite or diamond or carbonaceous)	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14
L63	174	L62 and @ad<"20010928"	US-PGPUB; USPAT	OR	ON	2006/05/25 23:14